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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/570,127

02/28/2006

Masahiro Yuhara

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P.O. BOX 980

VALLEY FORGE, PA 19482

EXAMINER

JIANG, YONG HANG

ART UNIT

PAPER NUMBER

2612

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/570,127	<b>Applicant(s)</b> YUHARA, MASAHIRO	
	<b>Examiner</b> YONG HANG JIANG	<b>Art Unit</b> 2612	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 February 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 and 14-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 14-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/19/2009 &amp; 5/28/2009</u> .                               | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

Applicant's amendment filed 2/28/2006 has been entered. Claims 3-5 are amended. Claims 6-13 are cancelled. Claims 14-23 are newly added. Claims 1-5 and 14-23 are pending.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
1. Claims 1 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugawara (US 7,002,449), and further in view of Quinno et al. (US 6,275,379).

Regarding claim 1, Sugawara discloses a vehicle control apparatus, comprising:  
antenna means for communicating (via car antenna 8(6), See Col. 3, lines 37-47)  
with an authentication information storage unit (via mobile device 1 carried by a user,  
See Col. 3, lines 29-36) having stored therein authentication information used to

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authenticate a user of a vehicle (via ID data stored on mobile device 1, See Col. 4, lines 8-21);

control means (via collective control portion 3, col. 3, lines 48-55) for selectively outputting a first control signal to control a predetermined first device (via control signal to door lock mechanism 4) and a second control signal to control a predetermined second device (via ignition start/lock mechanism 6) based on said authentication information received by said antenna means, and in which said control means is operative to output said first control signal to said first device under the condition that a lock of said vehicle is locked and said authentication information is matched with predetermined authentication information (via mobile device 1 carried by a user responding with an answer signal containing registered ID, See Col. 4, lines 1-22), and output said second control signal to said second device under the condition that said authentication information is matched with predetermined authentication information after said lock of said vehicle is unlocked (via car mounted device 2 communicates with the mobile device 1 and brings the immobilizer authentication portion 9 into the operative condition and the control portion 3 supplies a release signal to the ignition start/lock mechanism 6, See Col. 4, lines 34-63).

Sugawara did not specifically disclose the apparatus further comprising retaining means provided in said vehicle and disposed in spaced apart relationship with said antenna means at a predetermined distance to retain said authentication information storage unit; and said authentication information storage unit is retained by said retaining means to output said second control signal.

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Quinno teaches a visor docking arrangement for a removable transmitter. The docking arrangement allows a transmitter to be securely mounted to an accessible area of the vehicle, and also allows easy removal of the transmitter by a user. (See the Abstract and Col. 1, lines 23-36)

From the teachings of Quinno, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Sugawara to include retaining means provided in said vehicle and disposed in spaced apart relationship with said antenna means at a predetermined distance to retain said authentication information storage unit; and said authentication information storage unit is retained by said retaining means to output said second control signal in order to make sure the transmitter is safely secured when a user is inside the vehicle to operate the vehicle.

Regarding claim 16, Sugawara discloses a vehicle unlocking device operative to unlock a lock of said vehicle upon receiving said first control signal (via door lock mechanism 4, See Col. 4, lines 1-25).

Regarding claim 17, Sugawara discloses an engine start permitting device operative to permit an engine forming part of said vehicle to start upon receiving said second control signal (via car mounted device 2 communicates with the mobile device 1 and brings the immobilizer authentication portion 9 into the operative condition and the control portion 3 supplies a release signal to the ignition start/lock mechanism 6, See Col. 4, lines 34-63).

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2. Claims 2 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugawara in view of Quinno as applied to claim 1 above, and further in view of Schurmann et al. (US 6,215,437).

Regarding claim 2, Sugawara does not specifically disclose said antenna means is operative to supply electric power to said authentication information storage unit to drive said authentication information storage unit.

Schurmann teaches that a procedure for reading the data stored in a transponder which derives its supply energy from an RF interrogation pulse sent to it by an interrogation device and which transmits the data stored in it as an RF response signal modulated by these data. (See Col. 1, lines 8-12)

From the teachings of Schurmann, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sugawara and Quinno to include said antenna means is operative to supply electric power to said authentication information storage unit to drive said authentication information storage unit as taught by Schurmann to derive energy from an RF interrogation pulse, thereby reducing costs by eliminating the use of a battery.

Regarding claim 16, Sugawara discloses a vehicle unlocking device operative to unlock a lock of said vehicle upon receiving said first control signal (via door lock mechanism 4, See Col. 4, lines 1-25).

3. Claims 3 and 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugawara in view of Quinno as applied to claim 1 above, and further in view of Tamura et al. (US 4,987,424).

Regarding claim 3, the combination of Sugawara and Quinno does not specifically disclose said antenna means is constituted by a film type antenna.

Tamura teaches a flexible film antenna made of a conductive material formed on a flexible insulating sheet. The film antenna is thin, light, and may easily be adhered on or embedded in a surface (See the Abstract and Col. 1, lines 10-16). From the teachings of Tamura, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sugawara and Quinno to include said antenna means is constituted by a film type antenna to easily embed the film type antenna on a vehicle.

Regarding claim 16, Sugawara discloses a vehicle unlocking device operative to unlock a lock of said vehicle upon receiving said first control signal (via door lock mechanism 4, See Col. 4, lines 1-25).

4. Claims 4 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugawara in view of Quinno as applied to claim 1 above, and further in view of Shibagaki et al. (JP 11-321471 A)

Regarding claim 4, the combination of Sugawara and Quinno does not specifically disclose said antenna means is provided in an outwardly exposed mirror unit forming part of said vehicle. Shibagaki teaches an antenna means provided in an outwardly exposed mirror unit forming part of a vehicle. (See the Abstract and Fig. 1) From the teachings of Shibagaki, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sugawara and

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Quinno to include said antenna means is provided in an outwardly exposed mirror unit forming part of said vehicle in order to allow better communication for the antenna by providing the antenna at an area outside of the vehicle.

Regarding claim 16, Sugawara discloses a vehicle unlocking device operative to unlock a lock of said vehicle upon receiving said first control signal (via door lock mechanism 4, See Col. 4, lines 1-25).

5. Claims 5 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugawara in view of Quinno as applied to claim 1 above, and further in view of Kane et al. (US 6,639,555)

Regarding claim 5, the combination of Sugawara and Quinno does not specifically disclose said antenna means is provided in an outwardly exposed sun visor forming part of said vehicle. Kane teaches an antenna means provided in an outwardly exposed sun visor forming part of a vehicle may improve the reception sensitivity with a reduced transmission loss (See Fig. 65 (a) and Col. 1, lines 54-59 and Col. 28, lines 33-43). From the teachings of Kane, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sugawara and Quinno to include said antenna means is provided in an outwardly exposed sun visor forming part of said vehicle as taught by Kane to improve the reception sensitivity of the antenna with a reduced transmission loss.



Regarding claim 16, Sugawara discloses a vehicle unlocking device operative to unlock a lock of said vehicle upon receiving said first control signal (via door lock mechanism 4, See Col. 4, lines 1-25).

6. Claims 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugawara in view of Quinno as applied to claim 1 above, and further in view of Tamura et al. (US 4,987,424) and Kane et al. (US 6,639,555)

Regarding claim 14, claim 14 is the combination of claims 3 and 5 above; therefore, claim 14 is rejected for the same reasons above.

Regarding claim 16, Sugawara discloses a vehicle unlocking device operative to unlock a lock of said vehicle upon receiving said first control signal (via door lock mechanism 4, See Col. 4, lines 1-25).

7. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugawara in view of Quinno as applied to claim 1 above, and further in view of Sakamoto et al. (US 2003/0191585).

Regarding claim 15, the combination of Sugawara and Quinno does not specifically disclose said authentication information storage unit is constituted by an electronic driver license. Sakamoto teaches that an electronic driver license may be used to store information to be used on a vehicle, the electronic driver license comprising a user information communicating section to communicate wirelessly with the vehicle. (See the Abstract and paragraph 32) From the teachings of Sakamoto, it

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would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sugawara and Quinno to include said authentication information storage unit is constituted by an electronic driver license as taught by Sakamoto to use an electronic driver license to store information to be easily used on a vehicle.

8. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugawara in view of Quinno and Schurmann as applied to claims 1-2 above, and further in view of Sakamoto et al. (US 2003/0191585).

Regarding claim 15, the combination of Sugawara, Quinno, and Schurmann does not specifically disclose said authentication information storage unit is constituted by an electronic driver license. Sakamoto teaches that an electronic driver license may be used to store information to be used on a vehicle, the electronic driver license comprising a user information communicating section to communicate wirelessly with the vehicle. (See the Abstract and paragraph 32) From the teachings of Sakamoto, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sugawara, Schurmann and Quinno to include said authentication information storage unit is constituted by an electronic driver license as taught by Sakamoto to use an electronic driver license to store information to be easily used on a vehicle.

9. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugawara in view of Quinno and Tamura as applied to claims 1 and 3 above, and further in view of Sakamoto et al. (US 2003/0191585).

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Regarding claim 15, the combination of Sugawara, Quinno, and Tamura does not specifically disclose said authentication information storage unit is constituted by an electronic driver license. Sakamoto teaches that an electronic driver license may be used to store information to be used on a vehicle, the electronic driver license comprising a user information communicating section to communicate wirelessly with the vehicle. (See the Abstract and paragraph 32) From the teachings of Sakamoto, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sugawara, Tamura and Quinno to include said authentication information storage unit is constituted by an electronic driver license as taught by Sakamoto to use an electronic driver license to store information to be easily used on a vehicle.

10. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugawara in view of Quinno and Shibagaki as applied to claims 1 and 4 above, and further in view of Sakamoto et al. (US 2003/0191585).

Regarding claim 15, the combination of Sugawara, Quinno, and Shibagaki does not specifically disclose said authentication information storage unit is constituted by an electronic driver license. Sakamoto teaches that an electronic driver license may be used to store information to be used on a vehicle, the electronic driver license comprising a user information communicating section to communicate wirelessly with the vehicle. (See the Abstract and paragraph 32) From the teachings of Sakamoto, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sugawara, Shibagaki and Quinno to include said

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authentication information storage unit is constituted by an electronic driver license as taught by Sakamoto to use an electronic driver license to store information to be easily used on a vehicle.

11. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugawara in view of Quinno and Kane as applied to claims 1 and 5 above, and further in view of Sakamoto et al. (US 2003/0191585).

Regarding claim 15, the combination of Sugawara, Quinno, and Kane does not specifically disclose said authentication information storage unit is constituted by an electronic driver license. Sakamoto teaches that an electronic driver license may be used to store information to be used on a vehicle, the electronic driver license comprising a user information communicating section to communicate wirelessly with the vehicle. (See the Abstract and paragraph 32) From the teachings of Sakamoto, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sugawara, Kane and Quinno to include said authentication information storage unit is constituted by an electronic driver license as taught by Sakamoto to use an electronic driver license to store information to be easily used on a vehicle.

12. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugawara in view of Quinno, Tamura and Kane as applied to claims 1 and 14 above, and further in view of Sakamoto et al. (US 2003/0191585).

Regarding claim 15, the combination of Sugawara, Quinno, Tamura, and Kane does not specifically disclose said authentication information storage unit is constituted

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by an electronic driver license. Sakamoto teaches that an electronic driver license may be used to store information to be used on a vehicle, the electronic driver license comprising a user information communicating section to communicate wirelessly with the vehicle. (See the Abstract and paragraph 32) From the teachings of Sakamoto, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sugawara, Tamura, Kane and Quinno to include said authentication information storage unit is constituted by an electronic driver license as taught by Sakamoto to use an electronic driver license to store information to be easily used on a vehicle.

13. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugawara in view of Quinno as applied to claims 1 and 16 above, and further in view of Sato (JP 2000-078279).

Regarding claim 18, the combination of Sugawara and Quinno does not specifically disclose an in vehicle telephone permitting device operative to permit an in vehicle telephone device to be used upon receiving said second control signal. Sato teaches an in vehicle telephone permitting device operative to permit an in vehicle telephone device to be used upon receiving a control signal (See the Abstract). From the teachings of Sato, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sugawara and Quinno to include an in vehicle telephone permitting device operative to permit an in vehicle telephone device to be used upon receiving said second control signal as taught by

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Sato to automatically permit the use of a in vehicle phone upon detecting an authorized user in the vehicle, thereby making the system more convenient.

14. Claims 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugawara in view of Quinno as applied to claims 1 and 16 above, and further in view of Hirano et al. (US 4,688,036).

Regarding claims 19-22, the combination of Sugawara and Quinno does not specifically disclose permitting the use of an in vehicle audio device, combination meter device, emergency calling device, or road to vehicle communication device upon receiving said second control signal.

Hirano teaches that a keyless entry system may be used to operate an automotive audio system, air conditioner, glove box lid lock and so forth. Therefore, a keyless entry system for a vehicle should not be considered to be limited to the specific applicable to door and trunk lid lock control, but can be applied to control of any desired vehicular equipment and/or devices. (See Col. 12, lines 7-18)

From the teachings of Hirano, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sugawara and Quinno to include permitting the use of an in vehicle audio device, combination meter device, emergency calling device, or road to vehicle communication device upon receiving said second control signal as taught by Hirano to control any desired vehicular equipment and/or devices with a keyless entry system, thereby making the a vehicular system easier to operate.

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15. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugawara in view of Quinno as applied to claims 1 and 16 above, and further in view of Sakamoto et al. (US 2003/0191585).

Regarding claim 23, the combination of Sugawara and Quinno does not specifically disclose said authentication information storage unit is constituted by an electronic driver license. Sakamoto teaches that an electronic driver license may be used to store information to be used on a vehicle, the electronic driver license comprising a user information communicating section to communicate wirelessly with the vehicle. (See the Abstract and paragraph 32) From the teachings of Sakamoto, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sugawara and Quinno to include said authentication information storage unit is constituted by an electronic driver license as taught by Sakamoto to use an electronic driver license to store information to be easily used on a vehicle.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YONG HANG JIANG whose telephone number is (571)270-3024. The examiner can normally be reached on M-F 9:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian A. Zimmerman can be reached on 571-272-3059. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Y. J./

Examiner, Art Unit 2612

/Brian A Zimmerman/

Supervisory Patent Examiner, Art Unit 2612